#### CALIFORNIA COASTAL COMMISSION

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# **Tu 13d**

#### STAFF REPORT AND RECOMMENDATION

## **ON CONSISTENCY CERTIFICATION**

Consistency Certification No. CC-010-02
Staff: MPD-SF
File Date: 2/07/2002
3 Months: 5/07/2002
6 Months: 8/07/2002
Commission Meeting: 3/5/02

**APPLICANT:** City of San Diego

**PROJECT** 

**LOCATION**: Point Loma Wastewater Treatment Plant, City of San Diego, and

offshore waters (Exhibit 1)

**PROJECT** 

**DESCRIPTION**: Reissuance of Secondary Treatment Waiver

FEDERAL

**AGENCY AND** 

**PERMIT**: EPA (Environmental Protection Agency) Reissuance, under Section

301(h) of the Clean Water Act, of a modified National Pollutant Discharge and Elimination System (NPDES) Permit for Wastewater

Treatment Plant Discharges

**SUBSTANTIVE** 

<u>FILE</u>

**DOCUMENTS:** See page 18.

# **EXECUTIVE SUMMARY**

Under the Clean Water Act, wastewater discharges from publicly owned treatment works (POTWs) are required to receive at least secondary treatment. However, Clean Water Act Section 301(h), sometimes referred to as the "ocean waiver" provision of the Clean Water Act, gives the EPA Administrator (with the concurrence of the RWQCB (Regional Water Quality

Control Board)) the authority to grant a waiver from otherwise applicable secondary treatment requirements. Such a waiver would authorize the City to continue to discharge effluent receiving less than full secondary treatment in terms of suspended solids, biochemical oxygen demand, and pH. The waivers need to be renewed every five years.

In reviewing past secondary treatment waiver and waiver renewal request for the City of Morro Bay, Goleta and Orange County, the Commission has historically concurred with consistency certifications and found applicable water quality and marine resource policies of the Coastal Act to be met when: (1) adequate monitoring is in place; and (2) when EPA and the appropriate RWQCB have determined that the discharger's effluent complies with the applicable Clean Water Act and Ocean Plan requirements.

Secondary treatment waivers are jointly issued by EPA and the RWQCB. EPA's independent Technical Evaluation determined that San Diego's discharges meet the applicable Clean Water Act standards for a waiver, and on March 13, 2002, the San Diego RWQCB is scheduled to hold a public hearing on whether the discharges would meet California Ocean Plan standards. Monitoring results for the past 5 years support San Diego's claim that the discharges comply with secondary treatment waiver requirements and would not adversely affect marine resources. The stringent monitoring as required under Section 301(h) will be continued. The City has upgraded its facilities since the waiver was originally granted, including adding wastewater reclamation facilities. The City's discharges would be consistent with the water quality, marine resources, commercial and recreational fishing, and public access and recreation policies (Sections 30230, 30231, 30234, 30234.5, 30213, and 30220) of the Coastal Act.

#### STAFF SUMMARY AND RECOMMENDATION:

**I.** Project Description. The City of San Diego has requested a waiver under Section 301(h) of the Clean Water Act (the Act), 33 U.S.C. Section 1311(h), from the secondary treatment requirements contained in Section 301(b)(1)(B) of the Act, 33 U.S.C. Section 1311(b)(1)(B). The waiver is being sought for the Point Loma Wastewater Treatment Plant (WWTP) and Outfall, which discharges 4.5 miles from Point Loma. The waiver would allow the discharge of wastewater receiving less-than-secondary treatment into the Pacific Ocean. The applicant has been operating under a waiver granted under a "special exception" to the 301(h) program, when Congress modified the Clean Water Act by adding in Section 301(j)(5). That section allowed San Diego to apply for a waiver after the deadline for such applications had passed (it also contained substantive requirements, which are discussed below). EPA and the RWQCB granted the initial waiver on December 12, 1995 (NPDES Permit No. CA0107409). On April 2001, the City applied to EPA for a renewal of the waiver.

The Point Loma WWTP, which serves the Metropolitan San Diego area, is located near the southern tip of Point Loma, and discharges wastewater from the City of San Diego through the Point Loma ocean outfall at a distance 4.5 miles from shore, west of Point Loma, in

approximately 100 meters of water. Existing wastewater flows in recent years (1999 and 2000) have been around 175 million gallons per day (MGD) (average flows). Projected flows for the year 2006 (the end of the 5-year permit) are estimated at 195 MGD. System capacity are 240 MGD (average) and 432 MGD (peak wet weather flow). (The project service area and facilities are further described in Exhibit 4.)

The City has made a number of upgrades to the treatment system since the previous waiver was granted in 1995, including: 1) the addition of two new sedimentation basins at the Point Loma plant; 2) construction of the Metro Biosolids Center (MBC) a regional solids handling facility; 3) construction of the North City Wastewater Reclamation Plant (NCWRP); and 4) construction of the South Bay Water Reclamation Plant (SBWRP).

Secondary treatment is defined in Clean Water Act implementing regulations (40 CFR Part 133) in terms of effluent quality for suspended solids (SS), biochemical oxygen demand (BOD) and pH. The secondary treatment requirements for SS, BOD and pH are as follows:

SS: (1) The 30-day average shall not exceed 30 mg/l (milligrams per liter). (2) The 7-day average shall not exceed 45 mg/l. (3) The 30-day average percent removal shall not be less than 85%;

BOD: (1) The 30-day average shall not exceed 30 mg/l. (2) The 7-day average shall not exceed 45 mg/l. (3) The 30-day average percent removal shall not be less than 85%;

pH: The effluent limits for pH shall be maintained within the limits of 6.0 to 9.0 pH units.

State water quality standards (i.e., the California Ocean Plan) require removal of 75% of suspended solids. The Ocean Plan does not have an effluent limitation for BOD; the comparable standard is for dissolved oxygen, and the Plan requires that "dissolved oxygen shall not at any time be depressed more than 10% from that which occurs naturally as a result of the discharge of oxygen-demanding waste materials."

The special legislation created for the City's application for a secondary treatment waiver (Ocean Pollution Reduction Act of 1994 (OPRA)/CWA Section 301(j)(5)/Public Law 103-431) requires:

- 1. 80% removal of TSS (monthly ave.);
- 2. 58% removal of BOD (annual ave.);
- 3. 45 MGD of water reclamation capacity by the year 2010; and
- 4. Reduction of TSS during the 5-year period of permit modification (EPA has interpreted this standard to require reduction of TSS from 15,000 to 13,600 metric tons/yr).

The following table compares the various statutory requirements:

Table 1. Comparison of treatment removal requirements. [Source: EPA Tentative Decision Document]

Requirement	Suspended Solids Removal	Biochemical Oxygen Demand Removal	pH Limitation
Primary	30% as 30-day average	30% as 30-day average	6-9
California Ocean Plan	75% as 30-day average	No Requirement	6-9
OPRA	80% as 30-day average	58% as annual average	
Secondary	85% as 30-day average	85% as 30-day average	6-9

The City's advanced primary system currently removes 80% of suspended solids. The City currently removes approximately 58% of BOD. The City is in the process of implementing reclamation: the NCWRP is now on line and handles 30 MGD, and the SBWRP is anticipated to go on line as soon as spring 2002, adding another 15 MGD of reclamation (Exhibit 2). Thus, the City anticipates achieving the "OPRA" requirement of 45 MGD of water reclamation up to eight years ahead of schedule.

The City is requesting a variance from secondary treatment standards for BOD and SS. The City is not requesting a waiver of pH requirements. The City's proposed effluent limits would require the removal of 80% of SS as a monthly average and the removal of 58% of BOD as an annual average. In addition, the upper limits suspended solids loadings to the ocean would be reduced to no more than 13,600 metric tons/year by the end of the 5-year permit period. Current suspended solids loadings are less than 1000 metric tons/yr.

The City has applied to the EPA and the RWQCB for reissuance of the 301(h) waiver. These waivers are independently reviewed but jointly issued by EPA and the RWQCB. EPA's independent Technical Analysis is attached as Exhibit 4. After EPA performs its technical review it issues a Tentative Decision to grant the 301(h) waiver of secondary requirements, which is then followed by RWQCB hearing (including public comments), and a final EPA decision (including responses to comments). On March 13, 2002, the RWQCB is scheduled to hold a public hearing on Order No. R9-2002-0025 on the permit; the RWQCB may or may not act on March 13, but in any event, final EPA action would not occur until 30 days after that time.

**II.** <u>Previous Commission Reviews of Waivers</u>. In 1979, and 1983-1985, the Commission reviewed a number of secondary treatment waiver applications under the federal consistency provisions of the Coastal Zone Management Act, and EPA ultimately granted many of these waivers. During these reviews the Commission expressed concern over the need for treatment meeting the *equivalent* of secondary treatment with respect to removal of toxics.

Nevertheless, at that time, the Commission consciously adopted a neutral position on the waivers. Since a position of "neutrality" is not an action that is recognized under CZMA regulations, the Commission's concurrence in the waivers was presumed pursuant to 15 CFR Section 630.63(a).

Section 301(h) waivers are only valid for 5 years, and three of the waivers initially granted subsequently came up for renewal: Morro Bay, Goleta, and Orange County (CSDOC). On January 13, 1999, and January 12, 1993, the Commission concurred with the City of Morro Bay's waiver renewals (CC-123-98 and CC-88-92). On January 8, 1997, and March 10, 1998, respectively, the Commission concurred with Goleta's and Orange County's Section 301(h) waiver renewals (CC-126-96 and CC-3-98).

On September 27, 1995, after a Commission public hearing, the Commission staff concurred with the previous submittal from the City of San Diego of a "No effects" letter (in lieu of a consistency certification) for the EPA-issued secondary treatment waiver (NE-94-95). That matter was reviewed as an administrative item due to unusual circumstances and history surrounding the waiver. The Commission normally reviews secondary treatment waivers and reissuances as consistency certifications, as is the case for the subject renewal.

III. <u>Status of Local Coastal Program.</u> The standard of review for federal consistency determinations is the policies of Chapter 3 of the Coastal Act, and not the Local Coastal Program (LCP) of the affected area. If an LCP that the Commission has certified and incorporated into the California Coastal Management Program (CCMP) provides development standards that are applicable to the project site, the LCP can provide guidance in applying Chapter 3 policies in light of local circumstances. If the Commission has not incorporated the LCP into the CCMP, it cannot guide the Commission's decision, but it can provide background information. The City of San Diego's LCP has been certified by the Commission and incorporated into the CCMP.

**IV.** <u>Applicant's Consistency Certification.</u> The City of San Diego certifies the proposed activity complies with the federally approved California Coastal Management Program and will be conducted in a manner consistent with such program.

#### **V. Staff Recommendation:**

The staff recommends that the Commission adopt the following motion:

MOTION. I move that the Commission concur with City of San Diego's consistency certification.

The staff recommends a **YES** vote on this motion. A majority vote in the affirmative will result in adoption of the following resolution:

#### **Concurrence**

The Commission hereby <u>concurs</u> with the consistency certification made by the City of San Diego for the proposed project, finding that the project is consistent with the California Coastal Management Program.

## VI. Findings and Declarations:

The Commission finds and declares as follows:

## A. Water Quality/Marine Resources

1. Regulatory Framework. The Environmental Protection agency (EPA) and the applicable RWQCBs (Regional Water Quality Control Boards) regulate municipal wastewater outfalls discharging into the Pacific Ocean under NPDES permits issued pursuant to the federal Clean Water Act. As enacted in 1972, the Clean Water Act required secondary treatment for all wastewater treatment nationwide. Amendments to the Clean Water Act in 1977 provided for Section 301(h) (33 USC Section 1311(h)) waivers of the otherwise applicable requirements for secondary treatment for discharges from publicly owned treatment works into marine waters.

Section 301(h) of the Clean Water Act provides that an NPDES permit which modifies the secondary treatment requirements may be issued if the applicant: (1) discharges into oceanic or saline, well-mixed estuarine waters; and (2) demonstrates to EPA's satisfaction that the modifications will meet those requirements specified in Section 301(h) (see pp. 7-9), including: (a) that the waiver will not result in any increase in the discharge of toxic pollutants or otherwise impair the integrity of receiving waters; and (b) that the discharger must implement a monitoring program for effluent quality, must assure compliance with pre-treatment requirements for toxic control, must assure compliance with water quality standards, and must measure impacts to indigenous marine biota. In California, the applicable water quality standards are embodied in the California Ocean Plan (see pp. 9-11 and Exhibit 5).

While the State of California (through the SWRCB and RWQCBs) administers the NPDES permit program and issues permits for discharges to waters within State waters, authority to grant a waiver and issue a modified NPDES permit under Section 301(h) of the Act is reserved to the Regional Administrator of EPA. Prior state concurrence with the waiver is also required.

Section 307(f) of the federal CZMA specifically incorporates the Clean Water Act into the California Coastal Management Program (CCMP). Commission consistency certification review is required for 301(h) applicants, because EPA NPDES permits are listed in California's program as federal licenses or permits for activities affecting land or water uses in the coastal zone. In reviewing the discharges, the Commission relies on the Clean Water Act and its implementing regulations, the California Ocean Plan, the Coastal Act (Chapter 3 policies), and

Water Code Section 13142.5 (incorporated into the Coastal Act by Section 30412(a)). These requirements, which are further described and summarized below, provide both specific numerical standards for pollutants, as well as general standards for protection of marine biological productivity.

a. <u>Clean Water Act/Section 301(h)</u>. Implementation of the Clean Water Act in California, for the most part, has been delegated to the applicable RWQCB for issuance of NPDES permits. Under an MOA between EPA and the State of California, NPDES permits for outfalls beyond 3 miles *and* for secondary treatment waivers (regardless of location) are issued jointly by EPA and the applicable RWQCB. The Clean Water Act divides pollutants into three categories for purposes of regulation, as follows: (1) conventional pollutants, consisting of total suspended solids (TSS or SS); biochemical oxygen demand (BOD, a measure of the amount of oxygen consumed during degradation of waste); pH; fecal coliform bacteria; and oil and grease; (2) toxic pollutants, including heavy metals and organic chemicals; and (3) non-conventional pollutants (a "catch-all" category for other substances needing regulation (e.g., nitrogen and phosphorus, chlorine, fluoride)).

Guidelines adopted under Section 403 of the Clean Water Act (40 CFR Part 125.120-124, Subpart M, "Ocean Discharge Criteria") specify that beyond an initial mixing zone, commonly referred to as the zone of initial dilution (ZID), the applicable water quality standards must be met. The zone of initial dilution is the boundary of the area where the discharge plume achieves natural buoyancy and first begins to spread horizontally. Discharged sewage is mostly freshwater, so it creates a buoyant plume that moves upward toward the sea surface, entraining ambient seawater in the process. The wastewater/seawater plume rises through the water column until its density is equivalent to that of the surrounding water, at which point it spreads out horizontally.

Section 301(h) of the Clean Water provides for secondary treatment waivers under certain circumstances. The following requirements must be met for EPA to grant a secondary treatment waiver:

- (1) there is an applicable water quality standard specific to the pollutant for which the modification is requested, which has been identified under section 304(a)(6) of this Act;
- (2) such modified requirements will not interfere, alone or in combination with pollutants from other sources, with the attainment or maintenance of that water quality which assures protection of public water supplies and the protection and propagation of a balanced, indigenous population (BIP) of shellfish, fish and wildlife, and allows recreational activities, in and on the water;
- (3) the applicant has established a system for monitoring the impact of such discharge on a representative sample of aquatic biota, to the extent practicable,

and the scope of the monitoring is limited to include only those scientific investigations which are necessary to study the effects of the proposed discharge;

- (4) such modified requirements will not result in any additional requirements on any other point or nonpoint source;
- (5) all applicable pretreatment requirements for sources introducing waste into such treatment works will be enforced;
- (6) in the case of any treatment works serving a population of 50,000 or more, with respect to any toxic pollutant introduced into such works by an industrial discharger for which pollutant there is no applicable pretreatment requirement in effect, sources introducing waste into such works are in compliance with all applicable pretreatment requirements, the applicant will enforce such requirements, and the applicant has in effect a pretreatment program which, in combination with the treatment of discharges from such works, removes the same amount of such pollutant as would be removed if such works were to apply secondary treatment to discharges and if such works had no pretreatment program with respect to such pollutant;
- (7) to the extent practicable, the applicant has established a schedule of activities designed to eliminate the entrance of toxic pollutants from nonindustrial sources into such treatment works;
- (8) there will be no new or substantially increased discharges from the point source of the pollutant to which the modification applies above that volume of discharge specified in the permit;
- (9) the applicant at the time such modification becomes effective will be discharging effluent which has received at least primary or equivalent treatment and which meets the criteria established under section 304(a)(1) of the Clean Water Act after initial mixing in the waters surrounding or adjacent to the point at which such effluent is discharged.

For the purposes of this subsection the phrase "the discharge of any pollutant into marine waters" refers to a discharge into deep waters of the territorial sea or the waters of the contiguous zone, or into saline estuarine waters where there is strong tidal movement and other hydrological and geological characteristics which the Administrator determines necessary to allow compliance with paragraph (2) of this subsection, and section 101(a)(2) of this Act. For the purposes of paragraph (9), "primary or equivalent treatment" means treatment by screening, sedimentation and skimming adequate to remove at least 30 percent of the biochemical oxygen demanding material and of the suspended solids in the

> treatment works influent, and disinfection, where appropriate. A municipality which applies secondary treatment shall be eligible to receive a permit pursuant to this subsection which modifies the requirements of subsection (b)(1)(B) of this section with respect to the discharge of any pollutant from any treatment works owned by such municipality into marine waters. No permit issued under this subsection shall authorize the discharge of sewage sludge into marine waters. In order for a permit to be issued under this subsection for the discharge of a pollutant into marine waters, such marine waters must exhibit characteristics assuring that water providing dilution does not contain significant amounts of previously discharged effluent from such treatment works. No permit issued under this subsection shall authorize the discharge of any pollutant into marine estuarine waters which at the time of application do not support a balanced, indigenous population of shellfish, fish and wildlife, or allow recreation in and on the waters or which exhibit ambient water quality below applicable water quality standards adopted for the protection of public water supplies, shellfish and wildlife, or recreational activities or such other standards necessary to assure support and protection of such uses. The prohibition contained in the preceding sentence shall apply without regard to the presence or absence of a causal relationship between such characteristics and the applicant's current or proposed discharge. Notwithstanding any of the other provisions of this subsection, no permit may be issued under this subsection for discharge of a pollutant into the New York Bight Apex consisting of the ocean waters of the Atlantic Ocean westward of 73 degrees 30 minutes west longitude and westward of 40 degrees 10 minutes north latitude.

In addition, as discussed on page 3, Section 301(j)(5) of the Clean Water Act provides procedural and substantive requirements enabling the City to apply for a waiver and specifying that discharges must meet the following tests: 80% removal of TSS (monthly ave.); 58% removal of BOD (annual ave.); 45 MGD of water reclamation capacity by the year 2010; and reduction of TSS during the 5-year period of permit modification.

**b.** <u>California Ocean Plan</u>. The California Ocean Plan was originally adopted by the SWRCB and approved by the EPA in June 1972, and is revised every three years. Among the California Ocean Plan requirements are the following water quality objectives (Chapter II):

- A. Bacterial Characteristics, for body-contact recreation and shellfish harvesting;
- B. Physical Characteristics, including floatables, visible oil and grease, discoloration of the surface, the reduction of light penetration, and the rate of deposition of solid and inert materials on the bottom;

- C. Chemical Characteristics, including dissolved oxygen, pH, dissolved sulfide in and near sediments, concentration of substances in the sediments, organic materials in the sediments, and nutrient levels, and including maintenance of standards such as protecting indigenous biota and marine life;
  - D. Biological Characteristics, including:
- 1. Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded.
- 2. The natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption shall not be altered.
- 3. The concentrations of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.
- E. Radioactivity, including maintenance of a standard that marine life shall not be degraded.

# General requirements in the Ocean Plan include:

- A. Waste management systems that discharge to the ocean must be designed and operated in a manner that will maintain the indigenous marine life and a healthy and diverse marine community.
  - B. Waste discharged to the ocean must be essentially free of:
    - 1. Material that is floatable or will become floatable upon discharge.
- 2. Settleable material or substances that may form sediments which will degrade benthic communities or other aquatic life.
- 3. Substances which will accumulate to toxic levels in marine waters, sediments or biota.
- 4. Substances that significantly decrease the natural light to benthic communities and other marine life.
- 5. Materials that result in aesthetically undesirable discoloration of the ocean surface.

- C. Waste effluents shall be discharged in a manner which provides sufficient initial dilution to minimize the concentrations of substances not removed in the treatment.
- D. Location of waste discharges must be determined after a detailed assessment of the oceanographic characteristics and current patterns to assure that: ...
- 1. Pathogenic organisms and viruses are not present in areas where shellfish are harvested for human consumption or in areas used for swimming or other body-contact sports.
- 2. Natural water quality conditions are not altered in areas designated as being of special biological significance.
  - 3. Maximum protection is provided to the marine environment.

In addition, the Ocean Plan contains "Table A" effluent limitations for major wastewater constituents and properties, "Table B" limitations that provide maximum concentrations for toxic materials that may not be exceeded upon completion of initial dilution, and other standards. Table A and B limitations are contained in Exhibit 5.

(c) <u>Coastal Act Policies</u>. The Coastal Act contains policies protecting water quality and marine resources. Section 30230 of the Coastal Act provides:

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

#### Section 30231 provides:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

In addition to these resource protection policies, Section 30412 addresses the Commission's relationship with the SWRCB (State Water Resources Control Board and RWQCB); Section 30412 provides:

- (a) In addition to the provisions set forth in Section 13142.5 of the Water Code, the provisions of this section shall apply to the commission and the State Water Resources Control Board and the California regional water quality control boards.
- (b) The State Water Resources Control Board and the California regional water quality control boards are the state agencies with primary responsibility for the coordination and control of water quality. The State Water Resources Control Board has primary responsibility for the administration of water rights pursuant to applicable law. The commission shall assure that proposed development and local coastal programs shall not frustrate the provisions of this section. Neither the commission nor any regional commission shall, except as provided in subdivision (c), modify, adopt conditions, or take any action in conflict with any determination by the State Water Resources Control Board or any California regional water quality control board in matters relating to water quality or the administration of water rights.

Except as provided in this section, nothing herein shall be interpreted in any way either as prohibiting or limiting the commission, regional commission, local government, or port governing body from exercising the regulatory controls over development pursuant to this division in a manner necessary to carry out the provisions of this division.

Finally, Section 13142.5 of the Water Code, which is referenced in Section 30412 above, provides:

In addition to any other policies established pursuant to this division, the policies of the state with respect to water quality as it relates to the coastal marine environment are that:

- (a) Waste water discharges shall be treated to protect present and future beneficial uses, and, where feasible, to restore past beneficial uses of the receiving waters. Highest priority shall be given to improving or eliminating discharges that adversely affect any of the following:
  - (1) Wetlands, estuaries, and other biologically sensitive sites.
  - (2) Areas important for water contact sports.
  - (3) Areas that produce shellfish for human consumption.
  - (4) Ocean areas subject to massive waste discharge.

Ocean chemistry and mixing processes, marine life conditions, other present or proposed outfalls in the vicinity, and relevant aspects of areawide waste treatment management plans and programs, but not of convenience to the discharger, shall for the purposes of this section, be considered in determining the effects of such discharges...

**2.** EPA Evaluation of the City of San Diego's Discharges. EPA has conducted a technical evaluation analyzing San Diego's compliance with the 301(h) and other criteria discussed above. This tentative evaluation, dated, February 8, 2002 (Exhibit 4), includes the following EPA findings:

# **SUMMARY OF FINDINGS**

Based upon review of the data, references, and empirical evidence furnished in the application and other relevant sources, EPA Region 9 makes the following findings with regard to compliance with the statutory and regulatory criteria:

- 1. The applicant's proposed discharge complies with the California Ocean Plan water quality standards for dissolved oxygen (DO), suspended solids, and pH. [Section 301(h)(1), 40 CFR 125.61]
- 2. The applicant's proposed discharge will not adversely impact public water supplies or interfere with the protection and propagation of a balanced, indigenous population (BIP) of fish, shellfish, and wildlife and will allow for recreational activities. [Section 301(h)(2), 40 CFR 125.62]
- 3. The applicant has a well-established water quality monitoring program and is committing the resources to continue the program. The City has been monitoring the area around the Point Loma discharge since 1991. EPA Region 9 and the San Diego Regional Water Quality Control Board (Regional Board) will review the existing monitoring program and modify as appropriate. These modifications will be included as provisions for monitoring the impact of the discharge in the 301(h) modified NPDES permit. [Section 301(h)(3), 40 CFR 125.63]
- 4. The applicant's proposed discharge will not result in any additional treatment requirements on any other point or nonpoint source (See letter from Regional Board dated January 24, 2002). [Section 301(h)(4), 40 CFR 125.64]
- 5. The applicant's existing pretreatment program was approved by EPA on June 29, 1982. [Section 301(h)(5), 40 CFR 125.66 and 125.68]

- 6. The applicant has complied with the urban area pretreatment requirements by demonstrating that it has an applicable pretreatment requirement in effect for each toxic pollutant introduced by an industrial discharger. The Urban Area Pretreatment Program was submitted to EPA and the Regional Board in August of 1996. This program was approved by the Regional Board on August 13, 1997 and by EPA Region 9 on December 1, 1998. [Section 301(h)(6), 40 CFR 125.65]
- 7. The City will continue their existing nonindustrial program which has been in effect since 1985. The City will also continue their existing comprehensive public education program to minimize the amount of toxic pollutants that enter the treatment system from nonindustrial sources. [Section 301(h)(7), 40 CFR 125.66]
- 8. There will be no new or substantially increased discharges from the point source of the pollutants to which the 301(h) variance will apply above those specified in the permit. [Section 301(h)(8), 40 CFR 125.67]
- 9. The applicant's removal of 80% of SS as a monthly average and 58% of BOD as an annual average is sufficient to demonstrate the federal requirement of at least 30% removal capability and the California Ocean Plan's 75% SS removal requirement. The discharge allows sufficient dilution to attain of State water quality standards and Federal water quality criteria. [Section 301(h)(9), 40 CFR 125.60]
- 10. The California Coastal Commission issued Consistency Certification for extending the Point Loma outfall on November 12, 1991. The City has requested a determination from the California Coastal Commission that the proposed discharge is consistent with the policies of the California Coastal Zone Management Program ... No permit may be issued that is not consistent with the policies of the California Coastal Management Program. The California Coastal Commission will be hearing this issue at their meeting on March 5-8, 2002. [40 CFR 125.59(b)(3)]
- 11. On June 28, 2999, the applicant sent letters to the US Fish and Wildlife Service and the National Marine Fisheries Service requesting concurrence with their conclusion that the discharge will have no impact to threatened or endangered species. The National Marine Fisheries Service concluded that there were no Federally listed species under its jurisdiction that would be affected by the discharge (letter dated August 10, 1999). No response has been received from the U.S. Fish and Wildlife Service. The permit is contingent on a finding from the U.S. Fish and Wildlife Service. There are no

designated marine sanctuaries located within the coastal zones of California that could be impacted by the modified discharge. [40 CFR 125.59(b)(3)]

- 12. In its operation of the Pt. Loma WWTP, the applicant will remove 80% of suspended solids from the effluent on an annual basis, remove 58% removal of biological oxygen demand from the effluent on an annual basis, and reduce the mass of solids during the period of modification to 13,599 metric tons per year. In addition, the applicant has constructed two reclamation facilities with a treatment capacity of 45 MGD.
- 13. The applicant sent a letter to the Regional Board requesting a determination that the proposed discharge would comply with the applicable water quality standards on April 4, 2000. The Regional Board confirmed that the City of San Diego's facilities on Point Loma are capable of meeting effluent limitations contained in the California Ocean Plan (see letter dated January 24, 2002). As specified in a Memorandum of Understanding (May 1986) between EPA Region IX and the California State Water Resources Control Board, the joint issuance of an NPDES permit which incorporates both the 301(h) decision and State waste discharge requirements will serve as the State's concurrence. A draft NPDES permit for the discharge has been developed jointly with the Regional Board. [40 CFR 125.59 (i)(2)]
- 3. Commission Conclusion. The information submitted by the City of San Diego, along with the supporting analysis and information from EPA and the RWQCB, supports its request for a continued secondary treatment waiver. Historically, the Commission has concurred with consistency certifications for these types of waivers and waiver renewals, and found applicable water quality and marine resource policies of the Coastal Act to be met, when: (1) adequate monitoring is in place; and (2) when EPA and the appropriate RWQCB have determined that the discharger's effluent complies with the applicable Clean Water Act and Ocean Plan requirements. In this case, the City has monitored its discharges since its initial waiver was granted in 1995, and these monitoring efforts support the City's conclusions that its discharges meet the applicable water quality and marine resource requirements. Moreover, the stringent monitoring as required under Section 301(h) will be continued.

Based on EPA's analysis including a review of plant performance and modeling efforts performed since 1995, the outfall does not appear to be resulting in any significant reduction in light transmissivity, any biologically significant changes in benthic community structure in the vicinity of the outfall (beyond the zone of initial dilution), or any significant changes in fish populations or fish diseases in the area. EPA and the RWQCB have also addressed a historic Commission's historic concern over toxics by continuing to include requirements for the implementation of a pollution prevention program to minimize discharge of toxic pollutants into the sewer system which might interfere with the treatment processes. As discussed on page 14, EPA states that the City complies with the urban area pretreatment requirements "by

demonstrating that it has an applicable pretreatment requirement in effect for each toxic pollutant," and that the City will continue its existing nonindustrial program (which has been in effect since 1985). Therefore, based on the analysis above, the Commission concludes that the City's discharges would be consistent with the applicable marine resource and water quality provisions (Sections 30230 and 30231) of the Coastal Act.

# B. Commercial Fishing/Recreation

Section 30230 of the Coastal Act, quoted in full on page 11, includes a requirement that:

Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

The Coastal Act also contains more specific policies protecting commercial and recreational fishing; Section 30234 provides:

Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Existing commercial fishing and recreational boating harbor space shall not be reduced unless the demand for those facilities no longer exists or adequate substitute space has been provided. Proposed recreational boating facilities shall, where feasible, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry.

Section 30234.5 provides:

The economic, commercial, and recreational importance of fishing activities shall be recognized and protected.

The Coastal Act also protects public recreation (such as surfing and other water-contact recreation). Section 30213 provides, in part:

Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided..

Section 30220 provides:

Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

As discussed in the water quality/marine resource section above, the City's monitoring efforts over the past five years are sufficient to enable a determination that commercial/recreational

fishing and other recreational concerns are met. Most recreational activities are centered around the Point Loma kelp beds and in nearshore waters. SCUBA diving is very popular in the offshore kelp beds. Only limited diving occurs outside the area of the kelp beds. EPA's analysis of the City's plume modeling and monitoring data show that while there have been shoreline and kelp bed water quality standard exceedances, they are unlikely to be related to the City's outfall discharges. EPA states:

There are numerous exceedances of the single sample thresholds for Total Coliform, Fecal coliform and enterococcus (Fig. 53 [Exhibit 3]). However, these do not appear to be related to the Point Loma outfall. A high percentage of these are related to storm events. There also seems to be a spatial pattern which suggests a southern source. For perspective, these data can be compared to comparable data collected as part of the IWTP shoreline monitoring program (See Fig. 54 [Exhibit 3]). There is some overlap between the two program (i.e., San Diego's Stations D1 and D2 overlap with IWTP's Stations S8 and S9). There is a clear south-north gradient in the frequency of exceedances with a peak at the Tijuana River for all three bacterial indicators.

Exceedances are generally attributed to surface runoff (e.g. from the Tijuana River) rather than the outfall plume. This is supported by the lack of high concentrations in nearshore stations. This conclusion is also supported by modelling and monitoring efforts, which indicate that the outfall plume remains submerged in the offshore area.

Summary of bacteria data. EPA's review of the bacterial monitoring data suggests that the outfall plume is trapped at depth offshore and that the plume surfaces infrequently. Elevated concentrations of bacteria in the kelp beds were observed on rare occasion (less than 0.5% of the time). Although bacterial concentrations along the shoreline frequently exceed the standards, there is no evidence to suggest that this is related to the outfall. Based on these data, along with the results of physical oceanographic modeling performed by the applicant in 1994, EPA concludes that the Point Loma modified discharge will meet the COP bacterial compliance standards at the shoreline, recreational areas and at kelp beds.

Therefore, as discussed above with respect to marine resources, and with continued monitoring, the Commission concludes that the discharges would be consistent with the applicable commercial and recreational fishing and general recreation policies (Sections 30230, 30234, 30234.5, 30213, and 30220) of the Coastal Act.

#### **SUBSTANTIVE FILE DOCUMENTS:**

- 1. Consistency Certification No. CC-62-91/Coastal Development Permit No. 6-91-217 (City of San Diego, Point Loma outfall extension).
- 2. No Effects Determination NE-94-95 (City of San Diego, secondary treatment waiver).
- 3. RWQCB Tentative Order No. R9-2002-0025 and draft NPDES Permit No. CA0107409, City of San Diego.
- 4. RWQCB Order No. 95-106 and NPDES Permit No. CA0107409, City of San Diego.
- 5. Consistency Certifications for secondary treatment waiver renewals, CC-88-92 and CC-123-98 (City of Morro Bay), CC-126-96 (Goleta Sanitary District), and CC-3-98 (County Sanitation Districts of Orange County (CSDOC)).
- 6. Consistency Determination No. CD-137-96 (IBWC) International Boundary and Water Commission International Wastewater Treatment Plant Interim Operation.